AIR QUALITY PERMIT

Issued to:	Stimson Lumber Company Bonner Operation P.O. Box 1120 Bonner, Montana 59823	Permit #2806-06 Administrative Amendment (AA) Request Received: 8/20/07 Department Decision on AA: 2/13/08 Permit Final: 2/29/08 AFS# 063-0001

An air quality permit, with conditions, is granted to Stimson Lumber Company (Stimson) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740 *et seq*., as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location:

Stimson's Bonner operation is located in the NE ¼ of Section 21 and the NW ¼ of Section 22, Township 13 North, Range 18 West, in Missoula County. A description of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On August 20, 2007, the Department of Environmental Quality (Department) received a request to amend the Stimson's air quality permit for the Bonner Mill. However, the Department received additional information for this permit application through January 3, 2008.

Originally, the Bonner operation consisted of a lumber mill and a plywood mill. In July 2007, Stimson shut down the plywood mill. The plywood mill consisted of log vats, veneer lathes, veneer dryers, plywood press, saws and sanders. Stimson requested that permit provisions associated with the plywood mill be removed to reflect the change in operations.

In addition, because of the shut down of the plywood mill, Stimson believes that the Bonner Mill is no longer a major source of Hazardous Air Pollutants (HAPs) and requested federally enforceable limits be added to ensure the minor source status with respect to HAP emissions.

In conjunction with the request to add HAP limitations to both the Montana Air Quality Permit (MAQP) and Title V operating permit (OP), Stimson provided new emission factors that indicated kilns were not an insignificant source of volatile organic compound (VOC) emissions as was previously believed. Because of the magnitude of the VOC and HAP emissions, the Department requested that Stimson provide information supporting how they would comply with the requested HAP emission limit. Because Stimson requested a limit to stay under the major source threshold for HAP, the source would not be subject to major source provisions of any maximum achievable control technology (MACT) standards.

SECTION II: Limitations and Conditions

A. Emission Limitations

1. Wood-Waste Fired Boiler #1

a. Boiler emissions of total particulate shall be limited to 0.15 grains per standard cubic foot of air corrected to 12% carbon dioxide (ARM 17.8.752).

b. Visible emissions from the boiler shall be limited to 20% opacity (ARM 17.8.304).

2. Nebraska Natural Gas-Fired Boiler #3

a. Stimson shall only combust natural gas in the Nebraska Boiler (ARM 17.8.752).

b. The Nebraska boiler shall incorporate flue gas recirculation for the control of the nitrogen oxide (NO_x) emissions (ARM 17.8.752).

c. NO_x emissions from the Nebraska boiler shall not exceed 0.07 pounds per million British Thermal Units (lb/MMBtu) heat input (ARM 17.8.752).

d. Carbon monoxide (CO) emissions from the Nebraska boiler shall not exceed 0.25 lb/MMBtu heat input (ARM 17.8.752).

e. Stimson shall comply with all applicable standards, limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR 60, Subpart Dc for the Nebraska boiler (ARM 17.8.340 and 40 CFR 60, Subparts A and Dc).

3. The total-combined HAP emissions from Stimson's facility shall not exceed 9 tons per year (tpy) for any individual HAP or 24 tpy for all HAPs combined during any rolling 12-month time period (ARM 17.8.749).

4. Stimson shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. The Department may require further testing (ARM 17.8.105).

D. Operational Reporting Requirements

1. Stimson shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

Source	Units of Material Processed
Wood-waste boiler #1	Pounds of steam produced and tons of hog-fuel combusted
Nebraska Boiler #3	Cubic feet of gas combusted

2. Stimson shall document, by month, the HAP emissions from the boilers. By the 25th day of each month, Stimson shall total the HAP emissions from each unit for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.3. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

3. Stimson shall document, by month, the following information for the dry kilns. By the 25th day of each month, Stimson shall total the emissions from each kiln for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.3. The following information for each of the previous months shall be submitted along with the annual emission inventory:

    a) wood species and amount dried in thousand board feet (MBF).

    b) HAP emissions shall be reported as lb HAP/MBF.

    c) VOC emissions shall be reported as lb VOC/MBF.

    For the dry kilns, the calculation of VOC and HAP emissions shall be based on the species of wood, the amount of wood dried, and the most current emissions factors available, or site-specific kiln emission data (ARM 17.8.749).

4. Stimson shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745 that would include the addition of a new emission unit, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emissions unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

5. All records compiled in accordance with this permit must be maintained by Stimson as a permanent business record for at least five years following the date of the measurement, must be available at the plant site for inspection by the Department and must be submitted to the Department upon request (ARM 17.8.749).

Section III: General Conditions

A. Inspection – Stimson shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Stimson fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Stimson of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Stimson may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

Permit Analysis
Stimson Lumber Company
Bonner Facility
Permit #2806-06

I. Introduction/Process Description

A. Permitted Equipment

Stimson Lumber Company (Stimson) owns and operates a wood products facility. Permitted equipment at Stimson includes: boiler #1 (Hog-fuel fired) equipped with a wet scrubber; boiler #3 (natural gas fired) with flue gas recirculation; lumber drying kilns; sawmill building and associated equipment; vehicle fueling tanks (6); and planer and chipper load-out operations with associated baghouse and cyclones. The fugitive dust emission sources include, but are not limited to, hog fuel and chips handling, and vehicle traffic.

B. Source Description

Stimson facility operates a stud mill on the south bank of the Blackfoot River in Bonner, Montana. The facility is located in the NE ¼ of Sections 21 and the NW ¼ of 22, Township 13 North, Range 18 West, in Missoula County, Montana.

C. Permit History

The Bonner facility was originally constructed by the Anaconda Company in the early 1960s. **Permit #41** was issued to the Anaconda Company on May 2, 1969, for wood-waste boiler #1. In 1972, the U.S. Plywood division of Champion International (Champion) purchased the Bonner facility from the Anaconda Company. Champion was issued **Permit #604** on June 1, 1973, for the construction of the plywood manufacturing plant and on April 10, 1975, Champion was issued **Permit #795** for the veneer-dryer gas-incineration system.

On September 29, 1994, **Permit #2806-00** was issued to Stimson who transferred ownership of the Bonner facility from Champion to Stimson and also combined all of the existing permits applicable to the Bonner facility into one permit. Permit #2806-00 replaced Permits #41, #604, and #795.

On December 19, 1994, **Permit #2806-01** was issued to add the Riley Stoker wood waste boiler #2 to the Bonner facility's permit. This boiler was permitted by Missoula County in 1974, but had not been incorporated into Montana Air Quality's permit (MAQP) until this modification. This modification also removed all references to the Dutch Oven boilers at the facility. These boilers are no longer in use.

On August 6, 1995, the Department issued **Permit #2806-02** to add a scarfing unit which allowed the joining of shorter lengths of veneer into longer pieces for use in the manufacturing of plywood. The unit consisted of one Rate Veneer Scarfing Saw and two Rate Veneer Scarfing/Jointing Presses.

Particulate emissions from the scarfing saw were routed to the existing Plywood lay-up Baghouse. The baghouse had a manufacturer's guaranteed maximum emission rate of 0.005 grains per standard cubic foot of air (gr/dscf), and a change in design or airflow rate was not needed to accommodate the additional load. Therefore, there was little or no increase in estimated particulate emissions. Fugitive emissions from the jointer presses (volatile organic compounds (VOC) and Formaldehyde) were vented to the plywood building. An increase in both VOC and formaldehyde emissions (109.4 pounds per year (lbs/year) and 44.5 lbs/year, respectively) resulted from the installation of this unit.

This permitting action also removed temperature restrictions on the veneer dryers. Previously, the veneer dryers had been limited to a maximum temperature of 350 degrees Fahrenheit (°F) to reduce VOC emissions. This requirement was a holdover from Permit #604 authorizing construction of the plywood plant. Permit #795 authorized construction of the veneer-dryer gas-incineration system in 1974. This system routed the dryer gas to the boiler for VOC control. Because the dryer gas was routed to the boiler, there was no longer a need to apply the temperature restriction.

On June 25, 1997, **Permit #2806-03** was issued to authorize the installation of a Nebraska natural gas-fired boiler #3 to replace the #2 Riley Stoker wood waste-fired boiler. The Nebraska boiler is rated at 98 million British Thermal Units per hour (MMBtu/hr) and produces 70,000 pounds per hour of steam. The Nebraska boiler is used to supplement, or to provide backup, to the #1 wood-waste boiler. Nitrogen oxide (NO_x) emissions from the Nebraska boiler are controlled with the use of flue gas recirculation. The replacement of boiler #2 with boiler #3 resulted in potential decrease in emissions of all criteria pollutants from the facility.

After the Department issued its preliminary determination, changes were made based on comments from Stimson. The reference to a low NO_x burner was removed from the Best Available Control Technology (BACT) analysis, as the boiler is currently configured with flue gas recirculation only, and the Department determined this to constitute BACT for the boiler. In addition, the reference to decrease actual emissions was removed. There would be a decrease in actual emissions on a pounds/MMBtu basis; however, if the Nebraska boiler operated at its maximum potential, the emissions would exceed the boiler #2's previous actual emissions.

The following changes were made based on internal comments from the Department. A condition was added to require that the veneer dryers be shut down when the wood-fired boiler was not capable of accepting veneer-dryer gas because the Nebraska boiler would not be configured to burn the dryer gasses. Also, a condition was added requiring that flue-gas recirculation be incorporated in the design of the Nebraska boiler to ensure that this condition was federally enforceable.

On September 8, 1999, **Permit #2806-04** was issued to install the proposed prime line at the Stimson Bonner mill in order to coat their Duratemp® product with two coatings of prime. Duratemp® was one of Stimson's plywood products that had hardboard on one side, which was a finishing material (that looked like natural wood grain), but was made of a wood composite.

Duratemp® product was routed to the prime line where it was coated with prime, cured in an oven then coated with a non-blocking prime. The non-blocking prime was then cured in another oven. The Duratemp® was cooled before stacking for shipping. VOCs were the only air pollutants from the prime line, which result from VOCs being released as the coatings dry in the ovens. The emissions were routed to a single stack before exhausting to the atmosphere. At that time, the facility's allowable VOC emissions increased by 35 tons per year as a result of this project. Permit #2806-04 replaced Permit #2806-03.

On January 23, 2003, **Permit #2806-05** was issued to Stimson for the relocation of various pieces of equipment from the Stimson Libby Mill to the Stimson Bonner Mill. Specifically, the following equipment moved to the Bonner Mill: one 18-Opening Press; six pluggers with round table and strip saw; one spreader; one composer; and one 4-foot lathe.

Operation of the above-cited equipment increased Boiler #1 steam production demand by approximately 6,250 pounds per hour resulting in an increase in potential boiler emissions for all criteria pollutants, including an increase of carbon monoxide (CO) emissions of 23 tons per year. The Department determined that the proposed equipment would require an increase in steam demand not otherwise necessary absent the proposed project. Thus, in effect, the proposed project de-bottlenecks (i.e. increase utilization of) Boiler #1 operations with an increase in criteria pollutant emissions

directly attributable to the proposed project. Because the boiler was not physically modified to accommodate the proposed increased utilization, Boiler #1 was not subject to BACT review.

Furthermore, because the proposed project constituted a changed condition of operation resulting in an increase in CO emissions greater than the de minimis threshold of 15 tons per year (Administrative Rules of Montana (ARM) 17.8.745(1)(d)), the proposed project required a MAQP alteration. The increased steam utilization was most closely associated with the operation of the 18-opening press; therefore, the permit action incorporated a maximum throughput limit for the press to ensure potential emissions did not exceed emission estimates analyzed. Permit #2806-05 replaced Permit #2806-04.

D. Current Permit Action

On August 20, 2007, the Department of Environmental Quality (Department) received a request to amend the Stimson air quality permit for the Bonner Mill, with additional information submitted through January 3, 2008. The Bonner operation consisted of a lumber mill and a plywood mill, however in July 2007, Stimson shut down the plywood mill.

Under the current permitting action equipment and operations for the plywood mill would be removed as follows: chip storage pile, plywood log debarker, plywood mill bucking saws, plywood mill hog fuel and chips handling, lathe rejects and screening, plywood building, plywood layup baghouse, hog-press sawline baghouse, sander baghouse, saw baghouse, plywood press vent, knife grinding room, 18-opening press, landfill, indoor fuel storage pile, plywood chip bin loadout, #1 and #2 baghouse on A-frame, Boiler Sander Dust Baghouse, plywood fines cyclone, fines pipe cyclone, beauty bark bin cyclone, cyclone for auxiliary fuel system, plywood fines bin cyclone, fishtail saw cyclone above #1 surge bin, processor chips cyclone above #3 surge bin, rail chip cyclone, ply trim cyclone, Duratemp® primeline, veneer dryers, plywood press, saws and sanders. Stimson also requested that permit provisions associated with the plywood mill be removed to reflect the change in operations.

Because of the shut down of the plywood mill, Stimson believes that the Bonner Mill is no longer a major source of Hazardous Air Pollutants (HAPs), and requested federally enforceable limits be added to ensure the minor source status with respect to HAP emissions. In conjunction with the request to add HAP limitations to both MAQP and Title V operating permit, Stimson provided new emission factors that indicated kilns were not an insignificant source of emissions as was previously believed. Because Stimson requested a limit to stay under the major source threshold for HAPs, the source would not be subject to major source provisions of any maximum achievable control technology (MACT) standards.

In addition to the plywood mill closure, Stimson proposes to modify some of their equipment for the Bonner operation to increase the lumber mill's efficiency. These changes include: wider conveyors for lumber units, installation of movable saw guides on the band mill, a wider edge picking system and maintenance replacement on the horizontal gang edger. However, these changes will not increase the facility's potential emissions or production.

Permit #2806-06 was also updated to reflect current permit language and rule references used by the Department. Permit #2806-06 replaces Permit #2806-05.

E. Additional Information

Additional information, such as applicable rules and regulations, BACT/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, are included in the analysis associated with each permit.

II. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations, which apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available upon request from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1, General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices), and shall conduct test, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

   Stimson shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2, Ambient Air Quality, including, but not limited to:

1. ARM 17.8.204, Ambient Air Monitoring
2. ARM 17.8.210, Ambient Air Quality Standards For Sulfur Dioxide
3. ARM 17.8.211, Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212, Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213, Ambient Air Quality Standard for Ozone
6. ARM 17.8.214, Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220, Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221, Ambient Air Quality Standard for Visibility
9. ARM 17.8.222, Ambient Air Quality Standard for Lead
10. ARM 17.8.223, Ambient Air Quality Standard for PM_{10}

11. ARM 17.8.230, Fluoride in Forage

Stimson must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3, Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Stimson shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates by reference 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). The following are considered NSPS-affected facilities subject to the requirements of the following subparts:

   40 CFR 60, Subpart D, Standard of Performance for Fossil-Fuel Fired Steam Generators. This Subpart does not apply to the Nebraska boiler because it does not have the capability of firing fossil fuel at a heat-input rate of more than 250 MMBtu/hr.

   40 CFR 60, Subpart Db, Standard of Performance for Industrial-Commercial-Institutional Steam Generating Units. This Subpart does not apply to the Nebraska boiler because it does not have a heat input capacity of greater than 100 MMBtu/hour.

   40 CFR 60, Subpart Dc, Standard of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This Subpart applies to the Nebraska boiler because it was constructed after June 9, 1989, and has a heat input capacity of less than 100 MMBtu/hr, but greater than 10 MMBtu/hr.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:

   40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters. This Subpart does not apply to Stimson because the facility has requested a federally enforceable limit be added to the permit to ensure the minor source status with respect to HAP emissions.

   40 CFR 63, Subpart DDDD, National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products. This Subpart does not apply to Stimson because the facility has requested a federally enforceable limit be added to the permit to ensure the minor source status with respect to HAP emissions.

D. ARM 17.8. Subchapter 5 - Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. An application fee is not required for the current permit action because it is an administrative amendment.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

   An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7, Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. Stimson has a PTE greater than 25 tons per year of particulate matter (PM), PM with an aerodynamic diameter of 10 microns or less (PM_{10}), NO_x, CO, sulfur oxides (SO_x) and VOCs; therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1)This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative amendment.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is contained in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Stimson of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

11. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

12. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745

for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

13. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise allow.

Stimson is considered a major stationary source of emissions as defined under the New Source Review (NSR) Prevention of Significant Deterioration (PSD) program; however, potential emissions from the proposed project do not exceed the NSR/PSD significant emission threshold for any pollutant. Therefore, the current permitting action is not a major modification and does not require NSR/PSD review.

G. ARM 17.8, Subchapter 12, Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:

a. PTE > 100 tons/year of any pollutant;

b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2806-06 for Stimson, the following conclusions were made:

a. The facility's PTE is greater than 100 tons/year.

b. The facility's PTE is less than 10 tons/year for any individual HAP and less than 25 tons/year for all HAPs.

c. This source is not located in a serious PM_{10} nonattainment area.

d. This facility is subject to 40 CFR 60, Subpart Dc.

e. This facility is not subject to any current NESHAP standards.

f. This source is not a Title IV affected source, nor a solid waste combustion unit.

g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Stimson is subject to the Title V operating permit program. Stimson was issued a final and effective Title V Operating Permit #OP2806-04 on August 28, 2004. The proposed project will constitute a significant modification to Title V Operating Permit #OP2806-04. Stimson submitted a Title V operating permit application in conjunction with the MAQP information submitted for the current permit action.

III. BACT Analysis

A BACT determination is required for each new or altered source. Stimson shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. However, a BACT analysis is not required for the current permit action because it is an administrative amendment.

IV. Emission Inventory

The current permit action is administrative and there is no net increase in emissions. However, with the closure of the plywood mill, and in light of new emission factors for the kilns, the following is presented to update the emissions from the affected facilities.

Emissions* (tons/year)

Source	PM	CO	NOx	SOx	VOC	HAP
Boiler #1 (wood-fired)	NA	667.51	244.75	27.81	18.91	9.34
Boiler #3 (natural gas-fired)	NA	107.31	30.05	0.25	2.32	0.80
Dry kilns**	NA	NA	NA	NA	71.17	11.74
Total		**774.82**	**274.80**	**28.07**	**92.40**	**21.88**

*The emission inventory for the current permit action, MAQP #2806-06 is included below. However, all other applicable emission inventory's for previously approved emission units are located in Department files.

** The VOC emission calculations were based, in general, on emission factors from "Factors Affecting Lumber Kiln VOC Emissions," M.R. Milota, Oregon State University; and Method 25A.

Boiler #1 (Wood-waste fired)

Heating Value: 254 MMBtu/hr (company information)
Operating Hours: 8760 hours/year

PM/PM10 Emissions

PM and PM10 emission rates will remain constant. Permit #2806-05 limits PM/PM10 emissions to 0.15 grains/dscf corrected to 12% CO2.

CO Emissions
Emission Factor: 0.6 lb/MMBtu (AP-42, Table 1.6-2, 9/2003)
Calculations: 0.6 lb/MMBtu * 254 MMBtu/hr * 8760 hr/yr * 0.0005 tons/lb = 667.51 tons/yr

NOx Emissions
Emission Factor: 0.22 lb/MMBtu (AP-42, Table 1.6-2, 9/2003)
Calculations: 0.22 lb/MMBtu * 254 MMBtu/hr * 8760 hr/yr * 0.0005 tons/lb = 244.75 tons/yr

SOx Emissions
Emission Factor: 0.025 lb/MMBtu (AP-42, Table 1.6-2, 9/2003)
Calculations: 0.025 lb/MMBtu * 254 MMBtu/hr * 8760 hr/yr * 0.0005 tons/lb = 27.81 tons/yr

VOC Emissions
Emission Factor: 0.017 lb/MMBtu (AP-42, Table 1.6-3, 9/2003)
Calculations: 0.017 lb/MMBtu * 254 MMBtu/hr * 8760 hr/yr * 0.0005 tons/lb = 18.91 tons/yr

HAP Emissions	*see HAP emission inventory on file with the Department*	*9.34 tons/yr*

Boiler #3 (Natural gas-fired)

Heating value:	98 MMBtu/hr (company information)	
Operating hours:	8760 hrs/year	
Fuel capacity:	98 MMBtu/hr * 0.00102 scf/MMBTU * 8760 hrs/year =	761.27 scf/yr

PM/PM10 Emissions
PM and PM10 emission rates will remain constant. Permit #2806-05 limits PM/PM10 emissions to 50 grains/scf.

CO Emissions		
Emission Factor:	0.25 lb/MMBtu (permit limit)	
Calculations:	0.25 lb/MMBtu * 98 MMBtu/hr * 8760 hrs/year * 0.0005 tons/lb =	107.31 tons/yr
NOx Emissions		
Emission Factor:	0.07 lb/MMBtu (permit limit)	
Calculations:	0.07 lb/MMBtu * 98 MMBtu/hr * 8760 hrs/year * 0.0005 tons/lb =	30.05 tons/yr
SOx Emissions		
Emission Factor:	0.00059 lb/MMBtu (AP-42, Table 1.4-1, 7/98)	
Calculations:	0.00059 lb/MMBtu * 98 MMBtu/hr * 8760 hrs/year * 0.0005 tons/lb =	0.25 tons/yr
VOC Emissions		
Emission Factor:	0.0054 lb/MMBtu (AP-42, Table 1.4-1, 7/98)	
Calculations:	0.0054 lb/MMBtu * 98 MMBtu/hr * 8760 hrs/year * 0.0005 tons/lb =	2.32 tons/yr
HAP Emissions	*see HAP emission inventory on file with the Department*	*0.80 tons/yr*

Dry Kilns
VOC emissions:

Douglas Fir Emission Factor:	0.654 lb VOC/MBF (company information)	
Annual Douglas Fir kiln drying rate:	136,260 MBF/yr (company information)	
Calculations:	136,260 MBF/yr * 0.654 lbs VOC/MBF =	44.56 tons/yr
Grand Fir Emission Factor:	0.75 lb VOC/MBF (company information)	
Annual Grand Fir kiln drying rate:	10,800 MBF/yr (company information)	
Calculations:	10,800 MBF/yr * 0.75 lbs VOC/MBF =4.05 tons/yr	
Lodgepole Pine Emission Factor:	1.37 lb VOC/MBF (company information)	
Annual Lodgepole Pine kiln drying rate:	32,940 MBF/yr (company information)	
Calculations:	32,940 MBF/yr * 1.37 lbs VOC/MBF =22.56 tons/yr	
Total Dry Kiln VOC Emissions:		71.17 tons/yr
HAP emissions	*see HAP emission on file with the Department*	11.74 tons/yr

V. Existing Air Quality

The current permit action will not have any additional impacts to existing air quality. There is not an increase of emissions because of the changes at the facility, and therefore, an analysis of the ambient air quality impacts was not required. The Department believes that this permit action will not cause or contribute to a violation of any air quality standard.

VI. Air Quality Impacts

Stimson's Bonner operation is located in the NE ¼ of Sections 21 and the NW ¼ of 22, Township 13 North, Range 18 West, in Missoula County. The air quality of this area is classified as either better than National Standards or unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants except CO and PM_{10}. However, this permit action will not result in an increase in CO or PM_{10}.

Because this permit action does not change the operation or production at Stimson or cause an increase in emissions, the Department believes that the operational conditions and limitations will be protective

of the air quality for the site and surrounding area.

VII. Ambient Air Impact Analysis

The Department determined, based on ambient air modeling that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Takings or Damaging Implication Analysis

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, a private property taking and damaging assessment was not required.

IX. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment was not required.

Analysis prepared by: Jenny O'Mara
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